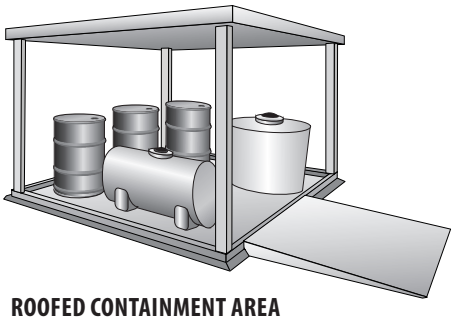
Containment

INFORMATION SHEET

Containment refers to methods to prevent material from leaving or entering a specific area. Containment is an effective means for preventing uncontaminated stormwater from flowing into or onto a contaminated activity area. It is also critical for containing spills in activity areas where pollutants may be present.

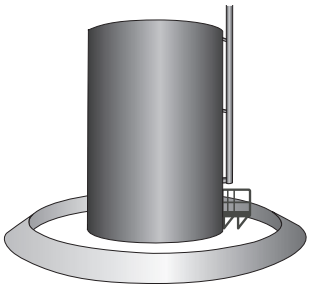
The term "secondary containment" means the specific requirement for all chemical liquids, fluids, petroleum products and hazardous wastes stored on–site, to be in a containment area sized to hold a volume of 110 percent of the volume of the largest container or 10% of the volume of all the containers, whichever is greater. Secondary containment may be achieved with specially designed containment pallets, concrete curbing, or earthen berms, depending on the nature and amount of the material, activities on site, and site–specific conditions.

- Use separate secondary containers for products and wastes that are incompatible, e.g. acids and bases.
- Make sure the construction materials and containers are compatible with products or wastes stored.



ROOFED CONTAINMENT AREA

Activity areas contained by a curb, berm, or dike (to prevent stormwater run–on) should be covered. This will stop precipitation from ponding inside the secondary containment area. In some instances, run–on prevention can be accomplished by placing a curb or berm on the upslope sides of the area. Elevating the activity or storing materials on a platform can also prevent stormwater run–on.

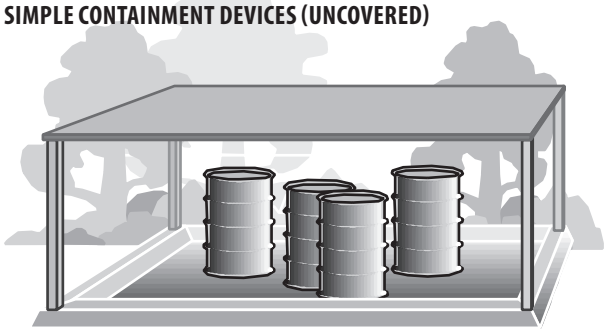


BIG OUTDOOR TANK WITH DIKE

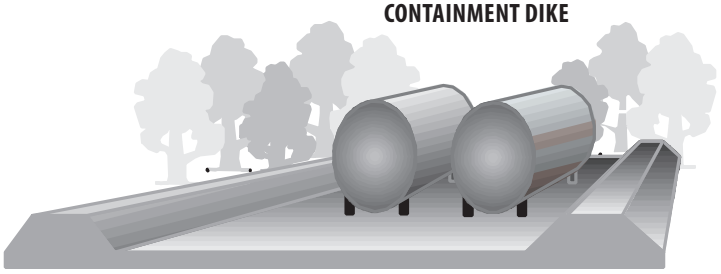
If not covered, containment areas will allow rainwater to accumulate. Contaminated water cannot be drained from the containment area to storm drains or surface waters, or infiltrated into the ground. The water must be collected and disposed of either in a sanitary sewer, a stormwater treatment system, or at a licensed decant facility. During the wet season, secondary containment without cover can lead to frequent disposal of relatively clean water that can be costly. For more detailed information on uncovered containment areas, see the Controlling and Collecting Contaminated Runoff Information Sheet

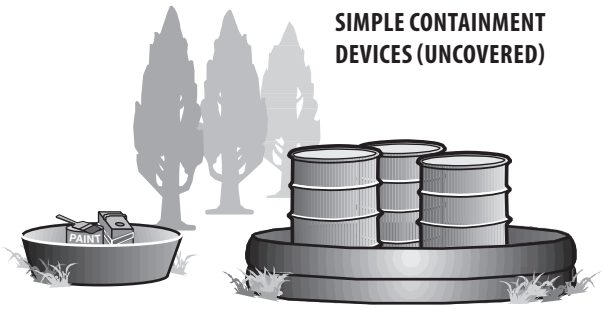
If containing stockpiles of erodible material, a dike, berm, or filtering device must be placed on at least three sides to act as a barrier or filter to treat runoff and to remove suspended solids. If the containment device is three–sided, the open side should not be on the upslope or the downslope side of the stockpile. The dike or filter can be made of hay bales, silt fencing (filter fabric), concrete curbing, ecology blocks, compacted earth with grass planted on it, or similarly effective materials. Timbers treated with creosote or other preservatives should not be used because they can leach contaminants into runoff. All filter materials used around stockpiles must be maintained to work effectively and must be replaced when necessary (see Appendix D of the Surface Water Design Manual for other options.

SIMPLE CONTAINMENT DEVICES (UNCOVERED)



CONTAINMENT DIKE





SIMPLE CONTAINMENT DEVICES (UNCOVERED)

For storing small items, a tub or wading pool is an acceptable containment structure. A rubber or plastic wading pool may be sufficient for containment of some stored materials that do not require much space, such as storing remodeling or painting materials, or temporary storage of wastes in drums.

These small storage devices should also be covered to prevent rain from accumulating. You must also consider the type of materials stored to ensure adverse chemical reactions do not occur with the containment material.

Regular maintenance of containment devices is essential for proper functioning. Commercial products are available that combine containment boxes with elevated pedestals. They prevent stormwater run–on by elevating containers of liquids off the ground and collecting spills and drips inside the pedestal box.

Local Sewer Agency

The name and phone number is identified on your water and sewer bill.

King County Wastewater Division – Industrial Waste Program

(206) 263–3000
www.kingcounty.gov/environment/wastewater/IndustrialWaste

King County Business Waste Line

(206) 263–8899
www.govlink.org/hazwaste/

King County Stormwater Services & Surface Water Design Manual

(206) 477–4811
www.kingcounty.gov/stormwater